

STATE OF NEW HAMPSHIRE
BUREAU OF PURCHASE AND PROPERTY
STATE HOUSE ANNEX
25 CAPITOL STREET
CONCORD, NEW HAMPSHIRE 03301-6398

ADDENDUM # 1 TO BID INVITATION #36

DATE OF BID OPENING: 7/26/04

TIME OF BID OPENING: 2:00 pm

FOR: CONTRACT FOR CULVERT LINING MATERIALS

SCANNED MATERIAL SPECIFICATIONS WERE LEFT OFF BID #36. PLEASE FIND ATTACHED ONE PAGE OF MATERIALS SPECIFICATIONS TO BE PART OF ABOVE-REFERENCED BID.

PURCHASING AGENT: ODIE L. CHAMPAGNE
TEL. NO.: 603/271-3146

NOTE: IN THE EVENT THAT YOUR BID INVITATION HAS BEEN SENT TO THIS OFFICE PRIOR TO RECEIVING THIS ADDENDUM, RETURN ADDENDUM WITHIN THE SPECIFIED TIME WITH ANY CHANGES YOU MAY WISH TO MAKE AND MARK ON THE REMITTANCE ENVELOPE BID INVITATION NUMBER AND OPENING DATE. RETURNED ADDENDA WILL SUPERSEDE PREVIOUSLY SUBMITTED BID.

BIDDER _____ ADDRESS _____

BY _____

(this document must be signed)

(please type or print name)

TEL. NO. _____

<p style="text-align: center;">MATERIALS SPECIFICATIONS</p>
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1. CORRUGATED GALVANIZED/ ALUMINIZED METAL CULVERT PIPE /:

Pipe, pipe arch and couplings shall conform to the requirement of AASHTO M-36 and the New Hampshire Department of Transportation Standard Specifications for Road and Bridge Construction, 1997, Sections 603 and 605. **Aluminized steel pipe (ALT2)** shall meet both AASHTO M-36 AND M-274.

Perforated corrugated steel pipe and coupling bands shall conform to the applicable requirements of AASHTO M-36, Type III. Pipe shall be Class I, the minimum allowable thickness of metal of 6 inch under drainpipe shall be 0.052 inches; the minimum allowable thickness of metal in under drainpipe larger than 6 inches shall be 0.064 inches.

Culvert pipe, under drain and pipe arch shall be furnished in two (2) foot increments as ordered, except that orders will conform as often as possible to those lengths standard to the industry.

2. CULVERT LINER, SIZE 12"-36"- PVC CORRUGATED PIPE:

Specification will be **PVC corrugated pipe with a smooth interior** for slip lining installation.

Pipe shall be manufactured in accordance with ASTM F949 as a single extrusion of the smooth liner and corrugated outer walls. The corrugation shall be annular and seamless.

The joints shall be bell and spigot and have the same outside diameter as the pipe. These couplings shall not increase the outside diameter or reduce the inside diameter when assembled. Joints shall meet the requirements of ASTM D3212 and shall remain water tight at 5 degrees angularity.

The minimum pipe stiffness shall be 46 PSI when tested in accordance with ASTM D4212. Minimum cell class PVC compound shall be 1245B in accordance with ASTM D1749. The minimum inside diameter and maximum outside diameter shall be as detailed below in accordance with ASTM F949.

PVC liner OD'S ARE: 12"=12.8", 15"= 15.7". 18" = 19.2", 21"=22.6", 24"=25.6", 30"=32.2", 36"=38.7".

3. CULVERT LINER, SIZE 42"-72"- ALUMINUM SPIRAL RIB:

Specification will be **Aluminum spiral rib pipe with a smooth interior** for slip lining installation.

The pipe shall be manufactured in accordance with AASHTO M-196 Type IR. The corrugation shall be ¾" x ¾" x 7.5".

42" and 48" will be 12 gage. 54" through 72" will be 10 gauges.

Internal expanding bands and gaskets, threaded grout couplers, aligning rods and rails for the above liner type are to be priced as unit cost as shown in the offer section of this bid.

4. CULVERT LINER, SIZE 42"- 108"- ALUMINIZED STEEL TYPE 2 RIB:

Specification will be **Aluminized Steel Type 2 spiral rib pipe** with a smooth interior for slip lining Installation. The pipe shall be manufactured in accordance with AASHTO M-36 type IR and AASHTO M-274. The corrugation shall be ¾" x ¾" x 7.5". Culvert liner sizes 42" – 72" will be 12 gage Culvert liner sizes 78" – 108" will be 10 gage.

Internal expanding bands and gaskets, threaded grout couplers, aligning rods and rails for the above liner type are to be priced as unit cost as shown in the offer section of this bid.

5. CULVERT LINER, SIZE 78"-108"- ALUMINIZED TYPE 2 CONCRETE:

Specification will be **Aluminized Steel Type 2 concrete lined CSP with a smooth interior** for slip lining installation. All pipe size will be 10 gages.

The pipe shall be manufactured in accordance with AASHTO M-36 AND M-274. The corrugation shall be either 3"x 1" or 5" x 1". The Portland cement concrete lining shall be factory applied around the full periphery in accordance with ASTM A-849 Class C.

Internal expanding bands and gaskets, threaded grout couplers, aligning rods and rails for the above liner type are to be priced as unit cost as shown in the offer section of this bid.